

that switched to another SSRI (\$169/patient/month) and the group that discontinued SSRIs (\$335/patient/month). Sensitivity analyses demonstrated that the physician (specialist) visit was the single most important cost component (range, \$100–\$760) in this hypothetical population.

**CONCLUSION:** Sildenafil can be a cost-effective add-on therapy to control SSRI-induced ED. Healthcare payers should consider this when developing optimum treatment strategies for men with depression.

**PMW3**

### **COVERAGE OF SILDENAFIL CITRATE BY EMPLOYERS AND HEALTH PLANS: LOWER THAN EXPECTED PHARMACY BENEFIT COSTS AND ADDITIONAL HEALTH BENEFITS**

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**OBJECTIVES:** The approval of sildenafil citrate as the first effective oral therapy for the treatment of erectile dysfunction (ED) was met with both anticipation of its potential benefits and concern regarding its potential costs to employers and health plans. Health plan executives and employer healthcare professionals were asked to determine what effect adding sildenafil to pharmacy formularies had on pharmacy benefit costs.

**METHODS:** Utilizing their own pharmacy and medical claims data, a panel of health plan executives and employer healthcare professionals determined the actual cost increase incurred as well as other effects of adding coverage of sildenafil to pharmacy benefits. Per member per month (PMPM) cost was calculated as total cost to the plan divided by total membership distributed over 12 months.

**RESULTS:** Panel members included three executives from health plans with 93,000 to 15 million members and 5 wellness and benefits specialists and corporate medical directors from companies employing 6000 to 150,000 employees. Actual PMPM costs associated with sildenafil addition to pharmacy formularies were \$0.04, \$0.05 or less, \$0.09, and \$0.21. Many of the companies sponsored men's health screening and educational programs in conjunction with introduction of sildenafil coverage. Adding sildenafil coverage and increasing the focus on men's health was associated with an increased use of the healthcare system by men resulting in earlier detection and treatment of underlying conditions that may contribute to ED including hypertension, diabetes, ischemic heart disease, dyslipidemia, depression, and prostate cancer.

**CONCLUSIONS:** Although estimates as high as \$1 PMPM were predicted, actual costs of sildenafil coverage were \$0.05 PMPM or less at several companies. Additionally, assessment of ED provided an important opportunity for physicians to screen their patients for other,

potentially serious medical conditions that otherwise may have gone undetected. This earlier disease detection may be associated with less expensive treatment and better outcome.

**PMW4**

### **DEVELOPING A BETTER UNDERSTANDING OF COST-EFFECTIVENESS OF HORMONE REPLACEMENT THERAPY (HRT): A COMPREHENSIVE REVIEW OF ECONOMIC ANALYSIS FROM 1980 TO 2001**

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**OBJECTIVE:** Numerous models have attempted to calculate the cost effectiveness (CE) of HRT in peri- and post-menopausal women. These models have used different methods, structure, assumptions and inputs. Consequently they have produced varying results, which can impede decision makers' ability to clearly understand the value of HRT. We developed standard evaluation scenarios to control for cross-study variations in model structure, major assumptions and inputs in order to better understand the CE of HRT.

**METHODS:** We evaluated 12 original models published between 1980 and 2001 and reporting net cost per LY/QALY saved. Eight standard scenarios, defined using age at initiation (<60 or ≥60 years of age), duration of therapy (<10 or ≥10 years), and inclusion of breast cancer and coronary heart disease (CHD), were compiled to facilitate this evaluation. The data collected were then analyzed within and across scenarios to detect common trends in results.

**RESULTS:** When the only benefit considered in the analysis was fracture prevention, the economic value of HRT was dependent on the length and age of initiation of therapy. CE was most favorable when HRT was initiated later in life and for long-term (>10 years) therapy. Analyses including CHD benefits considerably improved the CE ratios of HRT, regardless of age of initiation and duration of therapy.

**CONCLUSIONS:** Though some trends were identified with this method, we found the lack of consistency in methodology and inputs among the analyses did not provide a comprehensive evaluation of the economic value of HRT. Specifically, previous studies rarely included HRT's impact on menopausal symptoms, and no studies distinguished between the impacts of different HRT agents, which vary in terms of compliance and tolerability. Inclusions of these issues will likely affect the CE ratios, especially for younger postmenopausal women. Therefore, these inputs should be included in future economic analyses.